

Conclusions – Action items

ALL

**CDF/D0/AD luminosity meeting
of January 12th, 2005**

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Conclusions – Action items

- The CDF/D0 ratio is of the order of 1.09 in the end of the store, in recent stores after the shutdown. This is worse than it used to be before the shutdown. The ratio is still not flat as a function of luminosity although the rate of the change seems to be smaller after the shutdown.
- D0 is performing further checks on their luminosity measurements because of changes in the readout electronics and changes in the solenoid operating conditions during the shutdown. The reported numbers seem to be overestimated by 2-4% at low luminosities. Further checks needed for high luminosities. Trigger and physics cross section measurements as a function of luminosity would be very helpful.

Conclusions - Action Items

- CDF is performing further sanity checks as well on their luminosity measurements. Trigger and physics cross section measurements as a function of luminosity, especially as the luminosity increases, would be very helpful.
- The CDF and D0 measured luminosities will be compared with the expected luminosities.

Conclusions - Action Items

- o The Tevatron team plans or is in the process of performing the following studies:
 - a) Introducing a slight change on separator voltages with the goal of reducing even further the small crossing angle at the IPs (study in progress)
 - b) Lattice measurements (data analysis in progress)
 - c) Angle scans at the IPs
 - d) 8 on 4 stores for studies without the separators
 - e) implementing an alternative method to measure beta* using the new BPMs

Conclusions - Action Items

- We want to go back under the routine of having beam width measurements available by the experiments for every store. It would be very useful to compare this information internally for each experiment with their luminosity counter measurements.
- We plan to meet again the last week of February, probably Feb. 22 or Feb. 23.